

REMARKS

The specification has been amended to include a Sequence Listing, and claims 41 and 42 have been amended to address formalities-type issues. No new matter has been added by virtue of the amendments.

Applicants submit a Sequence Listing Submission herewith. The undersigned hereby avers that the content of the enclosed paper and computer readable copies of the Sequence Listing are the same and do not present any new matter.

Claims 41 and 42 were rejected under 35 U.S.C. 112, second paragraph for formalities-type issues.

While Applicants disagree with this formalities rejection, it is also believed the rejection has been obviated by the amendments made herein. Reconsideration and withdrawal of the rejection are requested.

A brief discussion of Applicants' invention may be helpful.

Applicants have discovered that enamel matrix, enamel matrix derivatives and/or enamel matrix proteins (i.e. together an active enamel substance) are beneficial agents for the enhancement or improvement of the attachment of healing of skin grafts.

Attention is directed to the actual results (including comparative testing) set forth in the examples of the application.

Applicants' independent claim 28 (the only independent claim under rejection) reads as follows:

Claim 28. A method for promoting the take of a graft, the method comprising administering to a mammal in need thereof a prophylactically or therapeutically effective amount of an active enamel substance.

Claims 28-35 and 41-55 were rejected under Carlson-Mann et al. in view of U.S. Patent 6,022,862 and Palaiologou.

In the Office Action, it is specifically acknowledged that Carlson-Mann does not suggest a method of promoting the take of a skin graft. Carlson-Mann is relied upon for a report of an active enamel substance.

In the Office Action, it is apparently acknowledged that the '862 patent does not mention use of active enamel substances. However, the '862 patent is cited for a report of promoting wound healing, although active enamel substances are not employed.

The rejection is traversed.

The rejection is based on improper hindsight reconstruction of Applicants' claimed invention. Clearly, no incentive would have existed to use an active enamel substance based on the report of Carlson-Mann in methods of promoting wound healing as reported in the '862 patent.

Indeed, the citations themselves *specifically teach against such a combination*. Thus, the '862 reports use of a pseudopterosin compound, **not** an active enamel substance. Carlson-Mann reports certain periodontitis treatment, **not** a method of promoting wound healing.

Indeed, Carlson-Mann is specifically limited to periodontal tissue. A skilled worker would not have any incentive to extend the report to other tissue.

The periodontal ligament is a type of cementum tissue, which is a mineralized tissue. Cells that make up dental tissues are different from any other type of connective tissue cells in the mammalian body.

The cited Pailaiolous et al. document clearly makes such distinction. In that document, three different fibroblast types (gingival (GF), periodontal ligament (PDF) and dermal (DF), with the first two being derived from oral tissue) are compared. The document itself indicates that: the fibroblast types behave differently and express different receptors; that GF and PDF are more similar with respect to their attachment than either is to DF; and that the results achieved in experiments using DF would not be valid for oral tissues.

In view thereof, reconsideration and withdrawal of the rejection is requested.

Claims 28-35, 41-47 and 50-55 were rejected under 35 U.S.C. 103 over Hammarstrom et al. in view of U.S. Patent 6,022,862. The rejection is traversed.

The documents cited here suffer from deficiencies similar to those discussed in the above rejection.

The Hammarstrom document merely reports use of a substance for treatment of acellular cementum and dentin for periodontal therapy. Nowhere does any suggestion exist that any other cells than those present in the formation of acellular cementum should be treated with an active enamel substance.

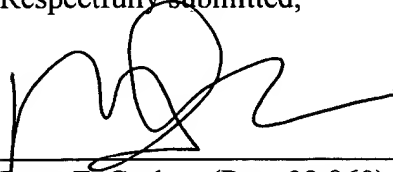
Thus, Hammarstrom provides absolutely no suggestion for use of an active enamel substance for treatment of tissue that is not mineralized and is not periodontal.

Reconsideration and withdrawal of the rejection are requested.

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It is believed the application is in condition for immediate allowance, which action is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'Peter F. Corless', written over a horizontal line.

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VERSION SHOWING MARKED CHANGES

41. (amended) A method according to claim 28 wherein the active matrix enamel substance is enamel matrix, enamel matrix derivatives, [or] enamel matrix proteins, or mixtures thereof.

42. (amended) A method according to claim 28 wherein the active matrix enamel substance is selected from the group consisting of enamelines, amelogenins, non-amelogenins, proline-rich amelogenins, amelins and [(ameloblastin, sheathlin),] tuftelins, and derivatives thereof and mixtures of said substances [thereof].